

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Petition Pursuant to 47 U.S.C. § 160(c))	WT Docket No. 02-377
For Forbearance From E911)	
Accuracy Standards in Section 20.18(h))	
of the Commission's Rules)	
)	

COMMENTS OF PETROCOM LICENSE CORPORATION

PetroCom License Corporation ("PetroCom"), by its attorneys, and pursuant to the invitation extended by the Wireless Telecommunications Bureau in its Public Notice of December 17, 2002,^{1/} hereby submits its comments in support of the petition, submitted by the Tier III Coalition For Wireless E911 ("Tier III Coalition"), seeking forbearance from the Phase II E911 accuracy standards set forth in Section 20.18(h) of the Federal Communications Commission's ("FCC" or "Commission") rules with respect to Commercial Mobile Radio Service ("CMRS") provided by so-called "Tier III" wireless carriers.^{2/}

^{1/} Public Notice, "Wireless Telecommunications Bureau Seeks Public Comment on Petition For Forbearance From E911 Accuracy Standards Imposed On Tier III Carriers," DA 02-3470, rel. December 17, 2002.

^{2/} The Tier III Coalition For Wireless E911 Petition Pursuant to 47 U.S.C. § 160(c) For Forbearance From E911 Accuracy Standards Imposed on Tier III Carriers For Locating Wireless Subscribers Under Rule Section 20.18(h), WT Docket No. 02-377, filed November 20, 2002 ("Tier III Coalition Petition"). The Commission defined Tier I carriers to include the six nationwide carriers, AT&T Wireless, Cingular Wireless, Nextel Communications, Sprint PCS, Verizon Wireless, and VoiceStream Communications (now T-Mobile); Tier II carriers to include CMRS carriers that had over 500,000 subscribers as of the end of 2001; and Tier III carriers as any CMRS provider that does not fall within Tiers I or II. Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Phase II Compliance Deadlines for Non-Nationwide CMRS Carriers, CC Docket No. 94-102, Order to Stay, 17 FCC

I. INTRODUCTION

PetroCom^{3/} is a full-service telecommunications and network solutions company serving the business community, with particular emphasis in the energy industry. Headquartered in New Orleans, Louisiana (with offices in Lafayette, LA and Houston, TX) and founded in 1983, PetroCom was the first offshore cellular network in the world. What began as a single cell site off the coast of Galveston, Texas in 1986 quickly grew into a 95,000-square mile satellite-based cellular network in the Gulf of Mexico (the “Gulf”), reaching from Brownsville, Texas to Mobile, Alabama. In addition to its cellular operations, PetroCom built and maintains a C-band and Ku-band satellite network, which routes traffic back to its New Orleans switch and teleport facility. In 1995, PetroCom took this satellite expertise, commercialized it, and today operates one of the industry's largest, most respected, Very Small Aperture Terminal (VSAT) network, with over 100 active remotes.

As PetroCom has notified the FCC, it intends to employ a network-based Phase II location technology using a combination of Time Difference of Arrival (“TDOA”) and Angle of Arrival (“AOA”) position determining equipment.^{4/} Unlike land-based cellular systems, cellular operations in the Gulf must necessarily cover a small population over a very large expanse of territory; as noted above, PetroCom’s service area is approximately 95,000 square miles.

Presently, PetroCom routes wireless 911 calls from the Gulf to the United States Coast Guard

Rcd 14841, ¶¶ 7, 22-23 (rel. July 26, 2002) (“Phase II Stay Order”) PetroCom has fewer than 500,000 subscribers and thus is a Tier III wireless carrier.

^{3/} PetroCom provides service to the public through its affiliate, Petroleum Communications, LLC. For ease of reference, both PetroCom License Corporation and Petroleum Communications, LLC are referenced herein as PetroCom.

^{4/} See PetroCom License Corporation Report on Implementation of Wireless E911 Phase II Automatic Location Identification, filed Jan. 11, 2001; PetroCom License Corporation Request for Relief, CC Docket No. 94-102, filed Nov. 30, 2001.

(“USCG”) Search and Rescue Operations in New Orleans, Louisiana, so that the USCG may screen the calls and act as a Public Safety Answering Point (“PSAP”).

The majority of PetroCom’s customers operate from fixed locations on oil platforms. Unlike the typical land-based wireless customer, a PetroCom customer on an oil platform can rely on, and will use, other emergency and safety systems, including company microwave systems, private radio systems, UHF/VHF and single side band systems. In addition, all oil production and service companies have emergency operating procedures and survival training. To date, PetroCom has not received any requests for Phase II service from the Coast Guard or any other PSAP.

Like PetroCom and many other Tier III wireless carriers, the members of the Tier III Coalition have learned that the Commission’s Phase II accuracy standards are virtually impossible with which to comply given the rural nature of Tier III carriers. Accordingly, the Tier III Coalition seeks relief from the strict quantitative requirements imposed by Section 20.18(h)(1) and (2) on Tier III carriers. The Tier III Coalition does not propose to extend the Phase II deployment deadlines.^{5/} Instead, it only seeks forbearance for a limited time, up to and including December 31, 2005, to allow sufficient time for Tier III carriers to collect accuracy and reliability information, which will enable all interested parties to determine an economically attainable level of location accuracy for both network and handset-based location solutions in real world deployment in rural environments.^{6/}

PetroCom believes that the FCC should, consistent with the Tier III Coalition’s requests, forbear from strict compliance with the Phase II accuracy standards. The Commission should permit Tier III wireless carriers to install a Phase II network solution at their existing cell sites,

^{5/} Tier III Coalition Petition at 1.

under the deadlines established in the Commission's rules and decisions^{7/} and deem the resulting accuracy levels compliant, even if they do not satisfy the Phase II accuracy requirements set forth in Section 20.18(h). Accordingly, PetroCom is pleased to have the opportunity to submit the following comments in support of the Tier III Coalition's petition.

II. COMMENTS

A. **Strict Compliance With The Commission's E911 Phase II Accuracy Standards Is Virtually Impossible For Tier III Wireless Carriers At This Time And May Ultimately Be Unnecessary In Providing Adequate Location Service To Rural Customers**

The Tier III Coalition petition correctly points out that multiple technical, operational and practical concerns preclude Tier III carriers from being able to achieve the Commission's Phase II accuracy standards.^{8/} This is not the first instance in which the FCC has been presented with information which suggests that the E911 accuracy standards may be difficult to achieve in rural areas. The recently issued "Hatfield E911 Report" noted similar concerns.^{9/} Rural wireless systems are faced with coverage and other technical challenges that wireless carriers serving urban areas do not confront. For example, PetroCom's 95,000-square mile service territory and the non-standard configuration of its base stations makes triangulation, critical to the provision of location information using network-based solutions, very difficult. These circumstances often result in the provision of weaker signals that lead to reduced location accuracy.

As the Tier III Coalition notes, to enhance accuracy over their large coverage areas, rural wireless carriers who adopt a network based Phase II E911 solution would have to add a

^{6/} Id. at 1-2.

^{7/} See Phase II Stay Order ¶¶ 32-33; 47 C.F.R. § 20.18(j).

^{8/} Tier III Coalition Petition at 13-14.

^{9/} See Dale N. Hatfield, A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services at 7 (rel. Oct. 15, 2002) ("Hatfield Report").

significant number of towers and equipment, at an enormous expense.^{10/} This problem would be particularly acute for PetroCom, whose only available option is to locate base stations on drilling and production platforms. Because these platforms are not uniformly spaced, PetroCom has little flexibility to install the additional base stations that will allow it to meet the Commission's E911 Phase II requirements.

As PetroCom noted in its comments responsive to the Hatfield Report, although large coverage areas are not unique to Tier III carriers, the lack of offsetting urban areas make it difficult for Tier III carriers like PetroCom to meet, on average, the location accuracy requirements.^{11/} Carriers that also serve urban areas that contain a larger concentration of base stations (which are better able to meet the accuracy requirements) are able to average their location accuracy performance, which may produce results that comply with the FCC's requirements. Thus, Tier III carriers are at a disadvantage in comparison with nationwide carriers in demonstrating that their systems satisfy the Commission's accuracy requirements.

Rural carriers also do not have the ability to spread their E911 costs over many markets, or the purchasing power to ensure the rapid delivery of equipment necessary to deploy E911 services. Passing the costs of adding towers to Tier III carriers' subscriber base (in order to meet the triangulation requirements of network based solutions), which is generally small, would be contrary to the public interest, especially when there is no guarantee that adding the base stations would lead to the provision of a Phase II location solution that satisfies the Commission's accuracy requirements. An increase in subscribers' rates to offset the costs of upgrading Tier III

^{10/} Tier III Coalition Petition at 15.

^{11/} Commission Announces Details of Inquiry on Technical and Operational Wireless E911 Issues, WT Docket No. 02-46, Comments of PetroCom License Corporation at 4-5 (filed Nov. 15, 2002).

carriers' infrastructure would likely cause subscribers to migrate to larger wireless carriers that can minimize large increases in rates by stretching costs over a larger subscriber base.

Carriers who opt to utilize a handset-based Phase II location solution would experience similar technical, operational and practical issues. As the Tier III Coalition notes, major handset manufacturers have abandoned their efforts to develop a TDMA-compatible, automatic location information ("ALI") handset solution because Cingular and AT&T Wireless are phasing out their TDMA networks in favor of alternative digital technologies.^{12/} Tier III carriers do not have the purchasing power to ensure the rapid delivery of ALI handsets that could meet the Commission's deployment deadlines while hoping that these untested ALI handsets will meet the FCC's accuracy requirements. Accordingly, carriers who intend to use handset based solutions to meet Phase II E911 requirements will also be challenged to do so.

The Tier III Coalition remarks that "the voluminous record before the Commission appears to be devoid of any real-world analysis of the impact of a moderate relaxation of the standards in rural areas on the ability to actually locate a user in a sparse environment."^{13/} In fact, a uniform accuracy standard between urban and rural carriers is likely unnecessary. As the Tier III Coalition submits, "pinpointing a 911 caller to within 500 meters in a rural application might well result in the authorities being able to actually find the caller (the only purpose behind E911 Phase II rules at all) in far less time than knowing the caller's location to within 150 meters in the center of a large urban area having, for example, four (4), fifty-story office buildings lying within that location parameter."^{14/} Accordingly, forbearing from enforcing Section 20.18(h) on Tier III wireless carriers will provide adequate time for Tier III carriers and the Commission to

^{12/} Tier III Coalition Petition at 23.

^{13/} Id. at 18.

^{14/} Id. at 37.

assess what level of accuracy is actually necessary in rural areas, as opposed to urban areas, to adequately serve the public interest and safety.

B. The Tier III Coalition Petition Is Specific, Focused And Limited In Scope And Satisfies The Requirements Of Section 10 Of The Communications Act.

The Tier III Coalition’s petition – although not a waiver request - complies with the Commission’s prior directives that petitions seeking waiver relief from Section 20.18 must be “specific, focused and limited in scope, and with a clear path to full compliance.”^{15/} Specifically, the Tier III Coalition requests a limited waiver of the Phase II accuracy requirements for Tier III carriers because no commercially available Phase II-compliant E911 location system has been identified that can be economically deployed and satisfy Section 20.18(h) accuracy standards throughout a licensed rural service area. The Tier III Coalition provided a detailed explanation of the technical, operational and practical issues that preclude Tier III wireless carriers from strictly complying with the Commission’s Phase II accuracy requirements. The Tier III Coalition petition also is limited in scope because it only requests forbearance from the Phase II accuracy requirements and not the Phase II deployment deadlines. Further, the Tier III Coalition request sets a clear path to full compliance because the petition requests forbearance for limited period, up to and including December 31, 2005.

In addition, the Tier III Coalition petition satisfies the requirements of Section 10 of the Communications Act of 1934, as amended (the “Act”).^{16/} Section 10 of the Act compels the Commission to forbear from applying any regulation to a telecommunications carrier or

^{15/} Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442, ¶ 44 (rel. Sept. 8, 2000) (“Fourth MO&O”) (citing Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) and WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969)).

^{16/} 47 U.S.C. § 160.

telecommunications service if the Commission determines that enforcement of the regulation is unnecessary to ensure the charges, practices, classifications, or regulations are just, reasonable and nondiscriminatory, or unnecessary to protect consumers.^{17/} The Commission must also determine that forbearance is consistent with the public interest and, in doing so, must consider whether forbearance will promote competitive market conditions.^{18/}

As the Tier III Coalition correctly points out, strict enforcement of Section 20.18(h) is unnecessary to ensure that Tier III carriers' rates are just, reasonable and nondiscriminatory.^{19/} In fact, strict enforcement of the rule would have the opposite effect. Strict enforcement of Section 20.18(h) is likely to cause Tier III wireless carriers to expend significant resources in order to attempt to satisfy the Commission's Phase II accuracy requirements. As the Tier III Coalition argues, the inevitable rate hikes these expenditures will necessitate may cause the unjust and unreasonable rates that Section 10(a)(1) was designed to preclude.^{20/}

Strict adherence to Section 20.18(h) accuracy also is unnecessary to protect consumers in rural areas served by Tier III wireless carriers. As the Tier III Coalition states, and as noted above, a flexible accuracy approach is unlikely to have an adverse impact in rural areas which are wide-open and sparsely populated, making locating E911 callers simpler.^{21/}

Finally, the Tier III Coalition correctly notes that competition will be promoted by permitting forbearance and thus allowing Tier III carriers to direct their limited resources to

^{17/} 47 U.S.C. § 160(a)(1) and (2).

^{18/} 47 U.S.C. § 160(a)(3) and (b).

^{19/} Tier III Coalition Petition at 39.

^{20/} Id. at 40.

^{21/} Id.

continued network development and deployment in tandem with the Phase II rollout.^{22/} Tier III wireless carriers are already financially strapped, in light of national financial circumstances, the state of the telecommunications industry, and the burden of other unfunded federal mandates such as CALEA, number pooling, and local number portability. The limited forbearance requested will enable Tier III carriers to conserve capital in order to meet both market and regulatory demands.

III. CONCLUSION

PetroCom hereby respectfully submits the foregoing comments and asks the FCC to proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

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January 24, 2003

WDC 326015v1

^{22/} Id. at 41-43.